



DIVISION OF MINES
BOARD OF COAL MINING EXAMINERS
CERTIFICATION REQUIREMENTS

UNDERGROUND ELECTRICAL REPAIRMAN

Article 3 of the Coal Mine Safety Laws of Virginia establishes requirements for certification of coal mine workers. The certification requirements are included in §45.1-161.24 through §45.1-161.41 in which the Board of Coal Mining Examiners is established for the purpose of administering the certification program. The Board has promulgated certification regulations 4 VAC 25-20 (VR 480-04-2), which set the minimum standards and procedures required for Virginia coal miner examinations and certifications.

CERTIFICATION CLASSIFICATION: *Underground Electrical Repairman

This certification authorizes the holder to:

- Perform electrical work and inspections at all surface areas of underground mines and at underground and surface areas of underground coal mines
- Make examinations on electrical equipment
- Conduct and record results of electrical examinations

NOTE: This certification shall be used at underground mines only.

APPLICATION/EXPERIENCE REQUIREMENTS:

- Application (BCME-1) and \$10.00 fee 5 working days prior to examination
- One year of electrical experience in underground coal mining under the direction of a certified underground electrical repairman or appropriately related work experience approved by the Chief of the Division of Mines
- Current first aid training (MSHA first aid 5000-23 acceptable)
- Six months credit will be granted for electrical educational training from a college, technical school, or vocational school

EXAMINATION REQUIREMENTS: A score of 80% on each element of the examination.

ELEMENTS OF EXAM	NUMBER OF QUESTIONS
▪ Alternating Current (AC)	20
▪ First Aid (MM)	20
▪ Direct Current (DC)	20
▪ Circuits & Equipment/drawings (CE)	20
▪ Cable Splicing (CS)	20
▪ High Voltage (HV)	20
▪ Legal Requirements (LR)	20
▪ Permissibility (PR)	20
▪ Gas Detection - practical demonstration	

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- Records - Practical Stations (6)
 1. Control Circuit Troubleshooting - Electrical Schematic Reading (ER)
 2. Electrical Examinations - Record Keeping (RK)
 3. Cable Troubleshooting (CT)
 4. Circuit Breaking Troubleshooting (CB)
 5. Permissibility (PD)
 6. High Voltage Power Move (VP)

RECOMMENDED REFERENCE/STUDY MATERIALS:

- Electrical Study Guide
- Coal Mine Safety Laws of Virginia
- BCME Requirements
- Title 30 CFR Part 18, 75, 77
- MSHA (Basic First Aid) Manual 3
- Mine Gases Packet

The above mentioned study materials are available at the Department of Mines, Minerals and Energy's Big Stone Gap Office, Customer Assistance Center (276) 523-8233 and Keen Mountain Field Office (276) 498-4533.

***8 hours Electrical Repairman continuing education will update this certification.**

Revised 03/08/02